

UNITED STATES DISTRICT COURT
FOR THE NORTHERN DISTRICT OF CALIFORNIA
OAKLAND DIVISION

IN RE FLASH MEMORY ANTITRUST
LITIGATION

Case No: C 07-0086 SBA

This Document Relates to All Actions.

ORDER DENYING INDIRECT-PURCHASER PLAINTIFFS' MOTION FOR CLASS CERTIFICATION; DENYING INDIRECT-PURCHASER PLAINTIFFS' MOTION FOR LEAVE TO AMEND; AND GRANTING IN PART AND DENYING IN PART INDIRECT-PURCHASER PLAINTIFFS' MOTION TO DISMISS CLAIMS OF CHRISTOPHER BESSETTE

PUBLIC VERSION

Docket 562, 567, 593

Plaintiffs, a putative class of indirect purchasers of NAND flash memory, bring the instant price fixing action, pursuant to Section 1 of the Sherman Act, 15 U.S.C. § 1, and state consumer protection laws. Plaintiffs allege that Defendants, manufacturers of NAND flash memory, conspired to fix prices for NAND flash memory chips, which were sold to various *direct purchasers* at artificially inflated prices. These direct purchasers, in turn, passed-through the alleged “overcharge” to *indirect purchasers*; that is, the end-users of various consumer and commercial electronics products. Plaintiffs seek to certify a Nationwide Class for injunctive relief and twenty Statewide Classes for damages and equitable relief for indirect purchasers of NAND flash memory cards, USB flash drives and digital media players.

The parties are presently before the Court on: (1) Indirect-Purchaser Plaintiffs' Motion for Class Certification (Docket 567); (2) Indirect-Purchaser Plaintiffs' Motion to Substitute Party Plaintiffs, or in the Alternative, for Leave to Amend to Substitute Party Plaintiffs (Docket 562); and (3) Indirect-Purchaser Plaintiffs' Motion to Dismiss Claims of Christopher Bessette without Prejudice (Docket 593). Having read and considered the papers filed in connection with this matter and being fully informed, the Court hereby DENIES Plaintiffs' motions for class certification and for leave to amend and GRANTS IN PART AND DENIES

1 IN PART their motion to dismiss the claims of Christopher Bessette (“Bessette”). The Court,
 2 in its discretion, finds this matter suitable for resolution without oral argument. See
 3 Fed.R.Civ.P. 78(b).

4 **BACKGROUND**

5 **I. FACTUAL SUMMARY**

6 Flash memory is a form of semiconductor memory commonly used in a variety of
 7 consumer and commercial electronic devices. Unlike other types of memory, such as Random
 8 Access Memory or RAM, flash memory is non-volatile, meaning that no power is needed to
 9 maintain the information stored in the chip.¹ The first generation of flash memory was known
 10 as NOR. Toshiba later developed a second type of flash memory – NAND – which affords
 11 greater functionality at lower cost. Since its advent, the use of NAND flash memory has
 12 become commonplace in electronic devices, such as digital media players like the iPod nano.
 13 Am. Compl. ¶ 12, 51-52; Keeley Decl. ¶ 47. During the last decade, sales of NAND flash
 14 memory have increased exponentially. In 1999 (the beginning of the proposed class period),
 15 sales of NAND flash memory were approximately \$72 million. Keeley Decl. ¶ 51. By 2007,
 16 sales had increased thirty-fold to almost \$2.5 billion. Id. During the same period,
 17 manufacturing output increased by 82,000 percent and the cost of NAND flash memory
 18 correspondingly decreased by 96% on a per bit basis. Id.

19 NAND flash memory chips function by storing “bits” of data in “cells” contained on the
 20 chip. Keeley Decl. Ex. 6. Though the basic technology underlying a flash chip essentially is
 21 the same, the chips themselves differ in a number of respects. Id. ¶¶ 55-56. NAND Flash
 22 chips vary in terms of: (1) density (capacity)²; (2) speed; (3) size; (4) power consumption and
 23 voltage requirements; (5) reliability; (6) package type; and (7) endurance (the number of times
 24 memory can be erased and rewritten). Id. ¶ 55. Other characteristics that may affect
 25 performance, or otherwise may be important for some applications, include: (1) bit

26 ¹ The Court uses the terms “flash memory” and “flash memory chip” interchangeably.
 27

28 ² Density refers to the number of cells on a chip. Higher cell count translates into higher
 memory capacity. Keeley Decl. Ex. 6.

1 organization; (2) cell type (whether multilevel or single-level); (3) mode; (4) lead content; and
 2 (5) operating temperature. Id. Collectively, Defendants have produced close to 2,000 different
 3 NAND flash memory chips. Id. ¶ 59. The variation in NAND flash chips is reflected in their
 4 prices, which, during the class period, has ranged from 1 cent to over \$200. Id. Ex. 3.

5 There are two aspects to the instant class action. One action is brought by Direct-
 6 Purchaser Plaintiffs; that is, individuals and entities who purchased NAND flash memory
 7 directly from the Defendant manufacturers.³ In contrast, this part of the litigation is brought by
 8 Indirect-Purchaser Plaintiffs on behalf of consumers who did not deal directly with or buy any
 9 flash memory from Defendants, but who instead, bought flash memory cards and other finished
 10 products containing flash chips from entities *other than* Defendants. The types of consumer
 11 and industrial products utilizing NAND flash memory vary greatly. Consumer applications
 12 include memory cards,⁴ USB Flash drives, personal digital assistants, laptop computers, digital
 13 audio players, digital cameras, GPS devices, gaming devices, solid state drives (“SSDs”), and
 14 mobile phones, among others. Am. Compl. ¶ 51-52; Keeley Decl. ¶ 52. Collectively,
 15 Defendants sold over 7,000 different types of NAND flash chips, chipsets and memory cards
 16 during the class period. Keeley Decl. ¶ 67 and Ex. 4. In terms of products containing flash
 17 memory, there are thousands of products manufactured or sold by a multitude of vendors.
 18 Burtis Decl. ¶¶ 19, 72.

19 The distribution channel (i.e., the chain of intermediaries) through which Defendants’
 20 NAND flash memory chips and products travel from Defendants to the end consumer is
 21

22 ³ The claims of the Direct-Purchaser Plaintiffs are set forth in a separate complaint.
 23 Those plaintiffs have separately filed a motion for class certification that the Court will address
 24 in a separate order.

25 ⁴ NAND flash memory cards are small, removable cards often used in digital cameras
 26 and smart-phones. The types of cards that used NAND Flash during the proposed class period
 27 include Compact Flash Cards, MultiMediaCards, Reduced-Size MultiMediaCards (RS-MMC),
 28 Reduced-Size MultiMediaCards Dual Voltage (RS-MMC DV), Secure Digital Cards (SD),
 Secure Digital High Capacity Cards (SDHC), mini Secure Digital High Capacity Cards
 (miniSDHC), micro Secure Digital Cards (microSD), micro Secure Digital High Capacity
 Cards (microSDHC), ATA Cards, Memory Sticks, and Smart Media Cards. Am. Compl. ¶¶ 51,
 76; Keeley Decl. ¶ 66. These cards differ in physical size, capacity, interface, performance,
 and applicability for different uses. Keeley Decl. ¶ 66; Burtis Decl. ¶¶ 20-21.

1 complex and varied. Burtis Decl. ¶¶ 9, 33, 54, 71-72. NAND flash is incorporated into
2 finished goods at varying stages in the distribution chain, and is typically resold (by itself or as
3 altered) several times before reaching the final end-consumer. Id. ¶¶ 71-72. Such
4 intermediaries include, among others, Original Equipment Manufacturers (“OEMs”), Original
5 Design Manufacturers, Electronic Manufacturing Services, distributors, resellers and retailers.
6 Netz Decl. ¶¶ 49-53. A typical chain of distribution between a Defendant and an end-
7 consumer class member involves five different transactions: (1) a Defendant sells a NAND
8 flash chip to a distributor; (2) the distributor resells the NAND flash chip to an OEM, like
9 Apple, which incorporates the chip as a component of a finished good like the the iPod nano;
10 (3) the OEM sells the product containing the NAND flash chip to a product distributor; (4) the
11 product distributor sells the product containing the NAND flash chip to a retailer such as Best
12 Buy or Staples; and (5) the retailer sells the product containing the NAND flash chip to a
13 consumer. Netz Depo. at 89:18-22. Each intermediary may add “value”— and ultimately,
14 cost, to the consumer—by incorporating the NAND flash chip with other components to make
15 an intermediate product or finished good or providing transportation or product display
16 services. Burtis Decl. ¶¶ 22-32. Available data shows that different retailers respond to cost
17 changes in different ways based on their individual competitive situations and strategies, i.e.,
18 there is no general or monolithic approach to passing-on increased costs, and that some
19 retailers do not respond to certain cost changes. Id. ¶¶ 30, 32.

20 **II. PROCEDURAL SUMMARY**

21 On January 5, 2007, Plaintiff Trong Nguyen filed suit on behalf of himself and others
22 who “indirectly purchased Flash Memory from one or more of the Defendants during the Class
23 Period,” for alleged violations of the Sherman Act and Clayton Act, as well as consumer
24
25
26
27
28

1 protection laws of various states.⁵ Docket 1. The Court subsequently related and consolidated
 2 the Nguyen action with twenty-three similar cases filed on behalf of direct and indirect
 3 purchasers of NAND flash memory and appointed interim lead counsel for the Direct-
 4 Purchaser Plaintiffs and Indirect-Purchaser Plaintiffs on November 15, 2007. Docket 256, 257.
 5 On February 7, 2008, Direct-Purchaser Plaintiffs and Indirect-Purchaser Plaintiffs filed
 6 separate, consolidated complaints. Docket 310, 311. Defendants filed a motion to dismiss as
 7 to each complaint.

8 On March 31, 2009, the Court issued its ruling denying Defendants' motion to dismiss
 9 the Direct-Purchaser Complaint and granting in part and denying in part the motion to dismiss
 10 the Indirect-Purchaser Complaint, with partial leave to amend. On May 1, 2009, the Indirect-
 11 Purchaser Plaintiffs filed their First Amended Consolidated Class Action Complaint
 12 ("Amended Complaint"). Docket 481. The Amended Complaint was filed by thirty-four
 13 individuals and entities who bought NAND flash memory, or products containing NAND flash
 14 memory *indirectly*, from Defendants since January 1, 1999 to the present. The named
 15 Defendants are: Samsung Semiconductor, Inc. and Samsung Electronics Company Ltd.
 16 (collectively "Samsung"); Toshiba America, Inc., and Toshiba America Electronic
 17 Components, Inc. (collectively "Toshiba"); Hynix Semiconductor America, Inc. and Hynix
 18 Semiconductor, Inc. (collectively "Hynix"); Renesas Technology Corporation and Renesas
 19 Technology America, Inc. (collectively "Renesas"); SanDisk Corporation ("SanDisk"); and
 20 Hitachi America, Ltd., Hitachi Semiconductor (America) Inc. and Hitachi Ltd. (collectively

21 ⁵ The Clayton Act was passed in 1914 in order to supplement the more general
 22 prohibitions contained in the Sherman Act. See 15 U.S.C. § 12. The Clayton Act "provides a
 23 vehicle for private enforcement of the [Sherman Act]."Cargill, Inc. v. Monfort of Colorado, Inc., 479 U.S. 104, 109 (1986). Under section 16 of the Clayton Act, "[any] person, firm,
 24 corporation, or association shall be entitled to sue for and have injunctive relief . . . against
 25 threatened loss or damage by a violation of the antitrust laws." Id.; see also Kingray, Inc. v. NBA, Inc., 188 F. Supp. 2d 1177, 1200 (S.D. Cal., 2002) ("Section 16 of the Clayton Act
 26 allows a private party to obtain an injunction for a violation of the Sherman Act: 'any person,
 27 firm, corporation, or association shall be entitled to sue for and have injunctive relief ... against
 28 threatened loss or damages by a violation of the antitrust laws.'"); J. Allen Ramey, M.D., Inc. v. Pac. Found. for Medical Care, 999 F. Supp. 1355, 1360 (S.D. Cal. 1998) ("The Sherman Act
 does not authorize private causes of action. The available remedies for private plaintiffs are
 found in the Clayton Act, which authorizes certain antitrust suits for monetary relief (§ 4) and
 injunctive relief (§ 16).").

1 “Hitachi”). Am. Compl. ¶¶ 53-65.

2 The Amended Complaint alleges that the NAND flash memory industry exhibits a
 3 number of characteristics that have facilitated the alleged conspiracy to control pricing. Id.
 4 ¶ 44. The NAND flash memory market is highly concentrated and is dominated by a “handful”
 5 of suppliers, i.e., Samsung, Toshiba, Renesas, Hynix and Micron. Id. ¶ 45. Over 90 percent of
 6 the worldwide market for flash memory is controlled by three companies, Samsung, Toshiba
 7 and Hynix. Id. ¶ 46. In addition, there are significant barriers to entry, as the cost to develop a
 8 modern NAND flash memory production facility can range from \$4 to \$5 billion. Id. ¶ 48.
 9 The flash memory industry is also notable for its numerous cross-licensing and joint venture
 10 agreements that have spanned from the mid-1990s through at least the end of 2007. Id. ¶ 49.
 11 These agreements, along with the Defendants’ participation in various trade associations and
 12 meetings, ostensibly have facilitated their ability to collude and control flash memory prices.
 13 Id. ¶¶ 50-59.

14 The Indirect-Purchaser Complaint alleges four claims for relief. The first claim seeks
 15 injunctive relief under Section 1 of the Sherman Act, 15 U.S.C. § 1. The second through fourth
 16 claims seek damages under the laws of twenty different states for Unjust Enrichment and
 17 Disgorgement of Profits, Violation of State Antitrust and Unfair Competition Laws, and
 18 Violation of State Consumer Protection and Unfair Competition Laws, respectively.

19 Plaintiffs now move to certify a Nationwide Class for injunctive relief, pursuant to Rule
 20 23(b)(2), defined as follows:

21 All persons and entities in the United States who, from January 1,
 22 1999 to the present, purchased in the United States, NAND Flash
 23 Memory indirectly from the Defendants for their own use and not
 24 for resale, contained in the following products: flash memory
 25 cards, USB flash drives, and flash-based digital media players.
 26 NAND Flash Memory includes AND and AG-AND Flash
 27 Memory and excludes all other types of flash memory, such as
 28 NOR Flash Memory, as well as all types of SRAM or DRAM.
 Excluded from the class are the Defendants; the officers, directors,
 or employees of any Defendant; any entity in which any
 Defendant has a controlling interest; and any affiliate, legal
 representative, heir, or assign of any Defendant. Also excluded are
 any federal, state, or local government entities, any judicial officer
 presiding over this action and the members of his/her immediate
 family and judicial staff, and any juror assigned to this action.

1 Am. Compl. ¶ 163; Indirect-Pls' Mot for Class Certification ("Mot.") at 1.

2 In addition, Plaintiffs seeks to certify twenty Statewide Classes for damages and/or
 3 equitable relief, pursuant to Rules 23(b)(3) and/or 23(b)(2), defined as follows:

4 All persons and entities in [Indirect-Purchaser State] who, from
 5 January 1, 1999 to the present, as residents of [Indirect-Purchaser
 6 State] purchased NAND Flash Memory in [Indirect-Purchaser
 7 State] indirectly from the Defendants for their own use and not for
 8 resale, contained in the following products: flash memory cards,
 9 USB flash drives, and flash-based digital media players. NAND
 10 Flash Memory includes AND and AG-AND Flash Memory and
 11 excludes all other types of flash memory, such as NOR Flash
 12 Memory, as well as all types of SRAM or DRAM. Excluded from
 13 the class are the Defendants; the officers, directors, or employees
 14 of any Defendant; any entity in which any Defendant has a
 15 controlling interest; and any affiliate, legal representative, heir, or
 16 assign of any Defendant. Also excluded are any federal, state, or
 17 local government entities, any judicial officer presiding over this
 18 action and the members of his/her immediate family and judicial
 19 staff, and any juror assigned to this action.

20 Mot. at 1; Am. Compl. ¶¶ 164-209. "Indirect-Purchaser State" refers to: Arizona, Arkansas,
 21 California, District of Columbia, Florida, Iowa, Kansas, Maine, Massachusetts, Michigan,
 22 Minnesota, New Hampshire, New Mexico, New York, North Carolina, Rhode Island, South
 23 Dakota, Tennessee, West Virginia and Wisconsin. Mot. at 1 n.3. Defendants have filed an
 24 opposition to the motion and Plaintiffs have filed a reply.

25 Also before the Court are two related motions filed by Plaintiffs. First, Plaintiffs move
 26 to substitute nine individuals who are serving as class representatives for eight states (Arizona,
 27 Arkansas, District of Columbia, Florida, Iowa, Kansas, New York, and Tennessee), with
 28 replacement representatives. The basis for the proposed substitution is that the existing
 1 representatives lack standing to pursue indirect purchaser claims. Defendants oppose the
 2 motion and the proposed amendments as untimely, prejudicial and futile. Second, Plaintiffs
 3 seek to dismiss the claims of Bessette, the class representative for the state of South Dakota,
 4 without prejudice, under Rule 41(a)(2) on the ground that he is not, in fact, a member of the
 5 class. Defendants do not oppose his dismissal, but contend that it should be *with* prejudice and
 6 that the Court should deny as moot his request to certify a class of South Dakota indirect
 7 purchasers. The Court discusses these motions seriatim.

LEGAL STANDARD

The district court has broad discretion in determining whether to certify a class in accordance with Federal Rule of Civil Procedure 23. Vinole v. Countrywide Home Loans, Inc., 571 F.3d 935, 942 (9th Cir. 2009). Plaintiffs bear the burden of showing that each of the four requirements of Rule 23(a) and at least one requirement of Rule 23(b) are met. Narouz v. Charter Comm'n, LLC, 591 F.3d 1261, 1266 (9th Cir. 2010). “The plaintiff must also show . . . that the class is indeed identifiable as a class.” Oshana v. Coca-Cola Co., 472 F.3d 506, 513 (7th Cir. 2006). In considering a motion for class certification, “the trial court must conduct a ‘rigorous analysis’ to determine whether the party seeking certification has met the prerequisites of Rule 23.” Zinser v. Accufix Research Inst., Inc., 253 F.3d 1180, 1186 (9th Cir.), amended, 273 F.3d 1266 (9th Cir. 2001) (citation omitted); Gen. Tel. Co. of the S.W. v. Falcon, 457 U.S. 147, 161 (1982).

Under Rule 23(a), plaintiff must show that: (1) the class is so numerous that joinder of all members is impracticable; (2) there are questions of law or fact common to the class; (3) the claims or defenses of the class representatives are typical of the claims or defenses of the class; and (4) the class representatives fairly and adequately protect the interests of all members of the class. “The four requirements of Rule 23(a) are commonly referred to as ‘ numerosity,’ ‘ commonality,’ ‘ typicality,’ and ‘ adequacy of representation’ (or just ‘ adequacy’), respectively.” United Steel, Paper & Forestry, Rubber, Mfg. Energy, Allied Indus. & Serv. Workers Int’l Union, AFL-CIO v. ConocoPhillips Co., 593 F.3d 802, 806 (9th Cir. 2010).

21 In addition to satisfying the requirements of Rule 23(a), plaintiff must show that the
22 lawsuit qualifies for class action status under one of the three criteria found in Rule 23(b). See
23 Dukes v. Wal-Mart, Inc., 509 F.3d 1168, 1176 (9th Cir. 2007). Rule 23(b) requires that the
24 plaintiff establish that: (1) there is a risk of inconsistent adjudication, or adjudication of
25 individual class member's claims would substantially impair non-party members' ability to
26 protect their interests; (2) the defendant acted on grounds generally applicable to the class; or
27 (3) common questions of law or fact predominate and class resolution is superior to other
28 available methods. Fed.R.Civ.P. 23(b).

1 In reviewing a motion for class certification, the court generally accepts the substantive
2 allegations of the complaint as true. In re Coordinated Pretrial Proceedings in Petroleum
3 Products Antitrust Litig., 691 F.2d 1335, 1342 (9th Cir. 1982). However, “the court also is
4 required to consider the nature and range of proof necessary to establish those allegations.” Id.;
5 Vinole, 571 F.3d at 947 n.15 (“The district court may consider the merits of the claims to the
6 extent that [they are] related to the Rule 23 analysis”) (citations omitted). In fact, “courts are
7 not only ‘at liberty to’ but *must* ‘consider evidence which goes to the requirements of Rule 23

8 [at the class certification stage] even [if] the evidence may also relate to the underlying merits

9 of the case.’” Dukes, 509 F.3d at 1178 n.2 (quoting in part Hanon v. Dataproducts Corp., 976

10 F.2d 497, 509 (9th Cir. 1992)) (alterations in original).

DISCUSSION

I. MOTION FOR CLASS CERTIFICATION

13 Defendants do not dispute that Plaintiffs satisfy the requirements of Rule 23(a).⁶
14 However, they challenge Plaintiffs' ability to meet the standards for certification under Rule
15 23(b)(2) because there is no threat of future or continuing injury and because Plaintiffs
16 primarily are seeking damages in this action. Defendants also contend that question of law and
17 fact do not predominate over questions affecting individual members, as required by Rule
18 23(b)(3). The Court, therefore, focuses its discussion on subsection (b) of Rule 23. See In re
19 Graphics Processing Units Antitrust Litig., 253 F.R.D. 478, 500 (N.D. Cal. 2008) ("In re
20 Graphics Processing") ("Given that the Rule 23(b) analysis is dispositive, there is no need to
21 address the Rule 23(a) factors.").

A. CERTIFICATION UNDER RULE 23(B)(2)

23 Plaintiffs first seek to certify a Nationwide Class for injunctive relief and twenty
24 Indirect-Purchaser Statewide Classes for equitable relief, pursuant to Rule 23(b)(2). Mot. at 1,
25 14-15. A court may certify a class under this rule where “the party opposing the class has acted
26 or refused to act on grounds that apply generally to the class, so that final injunctive relief or

⁶ Defendants challenge the adequacy of some class representatives. However, the focus of their opposition pertains to Rule 23(b).

1 corresponding declaratory relief is appropriate respecting the class as a whole.” Fed.R.Civ.P.
 2 23(b)(2).

3 Defendants contend that certification under Rule 23(b)(2) is unwarranted because
 4 Plaintiffs have failed to demonstrate any threat of continuing or future injury. See Maldonado
 5 v. Ochsner Clinic Found., 493 F.3d 521, 525 (5th Cir. 2007) (“Rule 23(b)(2) certification is . . .
 6 inappropriate when the majority of the class does not face future harm.”); Bolin v. Sears
 7 Roebuck & Co., 231 F.3d 970, 978 (5th Cir. 2000) (same). Plaintiffs insist that such a threat
 8 exists because “[t]he industry in question here (Flash) is part of one in which many of the
 9 major players have been found guilty of illegal price fixing (DRAM).” Reply at 13. Setting
 10 aside the vague and tenuous relevance of this assertion, Plaintiffs ignore the fact that the
 11 Department of Justice investigated claims of price fixing *in the flash memory industry* and
 12 made no findings of wrongdoing. Plaintiffs also ignore that since 1999, the price of NAND
 13 flash memory chips has fallen 96% (on a per bit basis), thereby rendering any concerns of
 14 future harm negligible. Keeley Decl. ¶ 51.

15 Certification of any Statewide Classes under Rule 23(b)(2) likewise is inappropriate in
 16 light of the fact that Plaintiffs’ primary intent in this litigation is to recover damages for past
 17 purchases. See Lozano v. AT & T Wireless Servs., Inc., 504 F.3d 718, 729 (9th Cir. 2007)
 18 (affirming denial of certification under Rule 23(b)(2) based on district court’s determination
 19 that plaintiff “sought primarily monetary damages”); Zinser, 253 F.3d at 1195 (“Class
 20 certification under Rule 23(b)(2) is appropriate only where the primary relief sought is
 21 declaratory or injunctive.”); Fed.R.Civ.P. 23(b)(2), Advisory Committee’s Notes to 1966
 22 amend., 39 F.R.D. 69, 102 (noting that subdivision (b)(2) “does not extend to cases in which
 23 the appropriate final relief relates exclusively or predominantly to money damages.”). Based
 24 on the pleadings and record presented, it is clear that Plaintiffs principally are seeking damages
 25 for past conduct. Thus, the Court, in its discretion, declines to certify the class under Rule
 26 23(b)(2).

27 **B. CERTIFICATION UNDER RULE 23(B)(3)**

28 Next, Plaintiffs seek to certify the Indirect-Purchaser Statewide Classes for damages

1 and equitable relief under Rule 23(b)(3). Mot. at 1, 15-24. Under this subsection, a class may
 2 be certified if the district court “finds that the questions of law or fact common to class
 3 members predominate over any questions affecting only individual members, and that a class
 4 action is superior to other available methods for fairly and efficiently adjudicating the
 5 controversy.” Fed.R.Civ.P. 23(b)(3). There are two components to Rule 23(b)(3)—
 6 predominance and superiority. Hanon, 150 F.3d at 1022-23. “The predominance inquiry
 7 focuses on the relationship between the common and individual issues and tests whether
 8 proposed classes are sufficiently cohesive to warrant adjudication by representation.” Vinole,
 9 571 F.3d at 944 (citation omitted). “The superiority inquiry under Rule 23(b)(3) requires
 10 determination of whether the objectives of the particular class action procedure will be
 11 achieved in the particular case.” Id.⁷

12 To determine whether the predominance requirement is satisfied, “courts must identify
 13 the issues involved in the case and determine which are subject to generalized proof, and which
 14 must be the subject of individualized proof.” In re Dynamic Random Access Memory
(DRAM) Antitrust Litig., 2006 WL 1530166, at *6 (N.D. Cal., June 6, 2006). Thus, “[t]o
 15 succeed in this action, plaintiffs must establish that: (i) there was a conspiracy to fix prices in
 16 violation of the antitrust laws; (ii) the alleged violations caused plaintiffs injury—‘impact’; and
 17 (iii) the injury can be identified.” In re Graphics Processing, 253 F.R.D. at 490 (citing Atlantic
 18 Richfield Co. v. USA Petroleum Co., 495 U.S. 328, 339-41 (1990)).

19 Here, the focus of the parties’ dispute concerns whether common evidence can be used
 20 to establish impact to the putative class. “[T]he task for plaintiffs at class certification is to
 21 demonstrate that the element of antitrust impact is capable of proof at trial through evidence
 22 that is common to the class rather than individual to its members.” In re Hydrogen Peroxide
Antitrust Litig., 552 F.3d 305, 311 -312 (3rd Cir. 2008). Where, as here, the plaintiffs are
 23 *indirect purchasers*, there are two-steps to the predominance analysis. First, Plaintiffs must
 24 show that *direct purchasers* paid an artificially inflated price for NAND flash memory chips
 25
 26
 27

28 ⁷ Defendants predicate their argument on predominance, as opposed to superiority.

1 and products. And second, Plaintiffs must establish that the direct purchasers, in turn, *passed*
 2 *through* some or all of the inflated cost to *indirect purchasers*. See In re Graphics Processing,
 3 253 F.R.D. at 502. As will be set forth below, Plaintiffs have not shown, to the Court's
 4 satisfaction, that common evidence can be presented to establish the requisite antitrust impact
 5 on direct purchasers *or* indirect purchasers.

6 **1. Impact on Direct Purchasers**

7 As an initial matter, Plaintiffs concede, as they must, that the bulk of Defendants' sales
 8 to direct purchasers were made pursuant to negotiated transactions which resulted in substantial
 9 variations in the prices paid by direct purchasers for NAND flash memory. As a general
 10 matter, antitrust claims predicated on negotiated transactions, as opposed to purchases based on
 11 list prices, often entail consideration of individualized proof of impact. See Robinson v. Texas
 12 Auto. Dealers Ass'n, 387 F.3d 416, 423 (5th Cir. 2004) ("By including in the plaintiff class
 13 every purchaser who paid a [Vehicle Inventory Tax], plaintiffs grouped consumers with
 14 divergent negotiating histories and removed the predominant factors needed to support this
 15 particular horizontal price-fixing claim. . . . Consequently, the proposed class fails the
 16 predominance requirement of rule 23(b)(3)."); In re Indus. Diamonds Antitrust Litig., 167
 17 F.R.D. 374, 382-84 (S.D.N.Y. 1996) (finding that individual questions predominated as to
 18 claims by purchasers of non-list price products).

19 No doubt recognizing the individualized nature of proof of impact inherent in cases
 20 such as the present where negotiated purchases are involved, Plaintiffs attempt to downplay the
 21 undeniable significance of such negotiations. Relying on the declaration of their expert, Dr.
 22 Janet Netz, Plaintiffs contend that the impact of Defendants' alleged conspiratorial conduct can
 23 be shown on a "common, formulaic basis" based on: (1) Defendants' utilization of price lists
 24 and price guidelines as a starting point for negotiating purchases with direct purchasers; (2) the
 25 centralization of Defendants' pricing decisions to ensure that pricing fell within certain
 26 parameters; and (3) Defendants' use of "most favored customer" ("MFC") clauses to promote
 27 uniformity in pricing. Mot. at 8; Netz Decl. at 40-42. Dr. Netz also proffers a hedonic
 28

1 regression analysis to explain the substantial variations in prices paid by Direct-Purchasers.

2 Netz Decl. at 45.

3 Plaintiffs' assertions regarding Defendants' purported use of price lists and the fact that
 4 final pricing decisions were made by senior management are overstated. Though some chip
 5 manufacturers maintained internal price lists (as would be expected where a manufacturer is
 6 selling a product), there were no uniform price lists for all Defendants or for all products
 7 available to customers upon which individually negotiated prices could have been based. Id.
 8 ¶ 26. Many sales contracts did not specify a future price, pricing formula or reference-pricing
 9 method, but instead called for renegotiation of prices on a frequent basis. As a result, prices for
 10 the same product varied among customers, and for the same customer, over time. Id. ¶¶ 26-27,
 11 86-87; Martin Decl. ¶ 2; Aldana Decl. ¶ 17. The fact that price patterns varied over time
 12 among different direct purchasers means that any meaningful analysis of impact or overcharges
 13 would have to be performed separately for each direct purchaser. In any event, neither the
 14 possibility that a price list was the *starting point* for a negotiation nor the existence of
 15 centralized decision making process obviates the fact that the *ultimate* purchase price was the
 16 result of an individualized negotiation between a particular Defendant and a particular direct
 17 purchaser. Keeley Decl. ¶¶ 126-127.

18 Dr. Netz's contention that Defendants' alleged reliance on price lists constitutes
 19 common proof of antitrust impact also ignores the realities of the market. In particular, she
 20 inappropriately presumes that direct purchasers possessed limited bargaining power, and
 21 therefore, negotiations were dictated by list prices. In actuality, direct purchasers had
 22 significant negotiating power by virtue of the fact that only a few direct purchasers accounted
 23 for the majority of NAND flash memory sales. The bulk of NAND flash memory purchases—
 24 82%—were made by only three direct purchasers (Apple, Lexar and Kingston). See Keeley
 25 Decl. ¶¶ 5, 23, 26, 27, 45, 80; Burtis Decl. ¶ 64. In addition, the effect of such bargaining
 26 power and the prices ultimately paid by direct purchasers are not amenable to common proof
 27 since their purchases were based on *individualized* negotiations and contracts with Defendants,
 28 with prices and purchasing patterns differing over time. Even then, significant variations

1 existed in terms of the purchasing power and bargaining position of certain direct purchasers
2 compared to others. For instance, prior to 2005, Lexar accounted for most of Defendants' chip
3 sales, while Apple accounted for only one percent of chip purchases. Keeley Decl. ¶ 74. The
4 market changed in 2004 and 2005 when Apple began incorporating custom flash memory into
5 certain of its iPod players, such as the nano and shuffle. Keeley Decl. ¶¶ 54, 57 n.66, 71. This
6 development is reflected in the size of Apple's flash memory purchases, which made up █%
7 of Samsung's sales and █% of Hynix's. Id. ¶ 30 n.37. Apple alone spent over \$ █
8 and accounted for █% of the Defendants' total NAND chip revenue during the proposed class
9 period. Id. ¶ 73. Thus, any meaningful and accurate proof of impact on direct purchasers, by
10 definition, will have to be on an individualized basis.

11 Nor does the Court find compelling Plaintiffs' contention regarding the inclusion of a
12 MFC clause in some purchase contracts. A MFC clause provides assurance to the customer
13 that it is receiving the most favorable price in comparison to other customers. Keeley Decl.
14 ¶ 128; Netz Decl. at 44. However, such a clause inures to the benefit of the customer (as
15 opposed to the seller), and, unsurprisingly, in most instances is included at the customer's
16 insistence. Keeley Decl. ¶ 128. As such, it is unclear how the use of such clauses has any
17 bearing on the impact of Defendants' conduct. That aside, there was no across-the-board
18 application of MFC clauses; rather, such clauses typically were limited to a particular product
19 or products purchased by that customer. Id. ¶¶ 87, 128. Thus, to the extent that a MFC clause
20 is in any way probative of the impact resulting from Defendants' activities, each clause would
21 have to be examined on a customer-by-customer, product-by-product, and contract-by-contract
22 basis.

23 Finally, the Court is unpersuaded by Plaintiffs' reliance on Dr. Netz's regression
24 analysis to explain the variations in individual transaction prices for purchases of NAND flash
25
26
27
28

1 memory.⁸ Netz Decl. at 44-48. Dr. Netz claims that her analysis shows that “over 90% of the
 2 variation in individual transaction prices of NAND flash memory sold to direct purchasers can
 3 be determined by *product and seller characteristics* that can be determined in a common
 4 manner, while less than 10% of the variation in individual prices is to be explained by factors
 5 unique to a specific purchaser.” Pls.’ Mot. at 8 (emphasis added). More specifically, she
 6 opines that “[m]ost of the variation in individual prices are explained by variations in product
 7 features [i.e., chip capacity and architecture]” and that the manner in which those features
 8 affect price can be expressed through the use of a formula. Netz Decl. at 45.

9 The flaw in Dr. Netz’s analysis is that it fails to take into account the fact the wide range
 10 of different types of products with equally varied attributes (other than capacity and
 11 architecture) and prices. Keeley Decl. ¶ 108.⁹ Thus, when Dr. Netz’s regression model is
 12 applied to actual transaction data involving a particular chip purchased by a particular
 13 customer, the explanatory price correlations predicted by her model fail to materialize. Id.
 14 ¶¶ 110-112. In addition, Dr. Netz’ regression analysis does not take into account individual
 15 variances in price trends based on a particular chip or a particular chip purchased by a specific
 16 Direct-Purchaser—or even more generally, by *category* of chip or *category* of customer. Id.
 17 ¶ 14. By looking only at an *average price trend*, Dr. Netz’s model obscures individual
 18 variations over time among the prices that different customers pay for the same or different
 19 products that appear in the data. Id. As a result, her analysis does little more than show that
 20

21 ⁸ A regression analysis is a statistical method of demonstrating a correlation between a
 22 dependent variable and independent variables. For instance, a regression can be used to show
 23 that price (dependent variable) is correlated to factors such as memory capacity and time
 24 (independent variables). See Freeland v. AT & T Corp., 238 F.R.D. 130, 149 n.15 (S.D.N.Y.
 2006) (“Hedonic regressions estimate the functional relationship between the characteristics
 embodied in the products in a market and the products’ prices.”) (quoting Bureau of Labor
 Statistics Handbook of Methods, Ch. 14 at 4); Keeley Decl. ¶ 30 (“A ‘hedonic’ price regression
 is one that attempts to estimate the relationship between product features and price.”).

25 ⁹ Dr. Netz’s regression analysis is based only on data from two Defendants, Hynix and
 26 Samsung. Netz Decl. at 45; Keeley Decl. ¶ 108. In her reply declaration, Dr. Netz asserts that
 27 after preparing her initial declaration, she received “additional transaction” data from Toshiba,
 28 and integrated such information into her regressions. Netz Reply Decl. at 21. The Court
 questions the propriety of Plaintiffs’ attempt to present new evidence with its reply.
 Nonetheless, the inclusion of data from Toshiba does not rectify the numerous deficiencies in
 Dr. Netz’s analysis, as set forth above.

1 the downward trend in prices is tied to technological advances, which is generally the case in
 2 the semiconductor industry. Id. ¶ 116. Her analysis does not support Plaintiffs' contention that
 3 individual variations in chip prices can be explained through the presentation of common
 4 evidence. In sum, the Court is not persuaded by Plaintiffs' showing that the antitrust impact on
 5 direct purchasers can be made on a common, formulaic basis. That alone is grounds for
 6 concluding that Plaintiffs have not satisfied the predominance requirement of Rule 23(b)(3).

7 **2. Impact on Indirect Purchasers**

8 Even if Plaintiffs had demonstrated the existence of a common, formulaic method of
 9 proving the impact on direct purchasers, their motion for class certification would fail on the
 10 ground that Plaintiffs have not persuaded the Court that a common, formulaic method exists for
 11 purposes of demonstrating the impact on indirect-purchasers. Recovery in an Indirect-
 12 Purchaser case under state law requires a demonstration that a defendant overcharged its
 13 Direct-Purchasers for the product at issue, and that those Direct-Purchasers then *passed on* the
 14 overcharges to indirect purchasers. See Somers v. Apple, Inc., 258 F.R.D. 354, 358 (N.D. Cal.
 15 2009) (Ware, J.). To satisfy Rule 23(b)(3), an indirect purchaser plaintiff must establish a
 16 reliable method for proving common impact—the overcharge pass-through—on indirect
 17 purchasers as a class. Id. at 361. Absent such a showing, a motion for class certification
 18 should be denied. Id. (declining to certify class of indirect purchasers of iPods where plaintiffs
 19 failed to show how all class members suffered injury as a consequence of defendant's alleged
 20 anti-competitive activity); In re Graphics Processing, 253 F.R.D. at 507 (denying class
 21 certification motion brought under Rule 23(b)(3) by indirect purchasers of graphics chips and
 22 cards); In re Methionine Antitrust Litig., 204 F.R.D. 161, 165 (N.D. Cal. 2001) (predominance
 23 requirement not met where impact of alleged price fixing varied greatly among putative class
 24 members regarding whether they were exposed to full effect of price inflation or some or all of
 25 inflation was absorbed by intermediate sellers) (Breyer, J.); but see In re TFT-LCD (Flat Panel)
 26 Antitrust Litig., 2010 WL 1286478 at *21-22 (N.D. Cal., filed March 28, 2010) (Illston, J.); In
 27 re Static Random Access Memory (SRAM) Antitrust Litig., --- F.R.D. ---, 2009 WL 4263524
 28 at *10-12 (N.D. Cal., Nov. 29, 2009) (Wilken, J.).

1 To demonstrate that antitrust injury to the class can be established through the
 2 presentation of common evidence, Plaintiffs again rely on the declaration of Dr. Netz. Mot. at
 3 21-23. Relying on what she characterizes as “well-accepted and thoroughly developed
 4 economic theory of pass-through,” Dr. Netz posits that the pass-through rate in this case is
 5 approximately 100%. Netz Decl. at 5, 53-57. However, the Court concurs with Defendants
 6 that the extent to which an alleged overcharge on a NAND flash memory chip is passed on
 7 through the various links in the distribution channel is more complex than the theoretical model
 8 presented by Dr. Netz. Burtis Decl. ¶ 54. Determining the pass-through for an individual class
 9 member first requires the identification of the particular channel applicable to the class
 10 member’s purchase, and tracing the overcharge through the various intermediaries that lie
 11 between the particular Defendant and the member. Id.

12 The tracing process requires more than the one-size-fits-all theoretical construct
 13 proposed by Dr. Netz. Within the three broad categories of products at issue (flash memory
 14 cards, USB flash drives and flash-based digital media players), there are thousands of
 15 differentiated products with diverse price points that have been purchased by putative class
 16 members over the course of the last decade. Such products are sold to class members by
 17 hundreds of different retailer suppliers. The price of any given product can vary across
 18 retailers, and differ even for a single retailer at a given point in time. Further, different retailers
 19 respond to cost changes in different ways, with some choosing not to pass-through cost
 20 changes in the form of higher prices for the end-user. See Burtis Decl. ¶ 9, 51-56. The
 21 “economic theory” cited by Dr. Netz’s accounts for none of these anomalies. See In re
 22 Graphics Processing, 253 F.R.D. at 496 (“Dr. Teece may not meet his burden [of showing
 23 common impact] by simply stating that ‘economic theory’ dictates that prices for retail and
 24 wholesale purchases generally go up together.”).

25 Equally misplaced is Plaintiffs’ reliance on Dr. Netz’s regression models, which she
 26 claims bolster her prediction of a 100% pass-through rate. Netz Decl. at 87-95.¹⁰ Dr. Netz

27
 28 ¹⁰ Dr. Netz states that a second regression analysis, the “top-to-bottom” approach also is
 applicable, but that she did not conduct such a study due to lack of data. Netz Decl. at 92.

1 states that two pass-through studies are applicable: (1) the “top-*and*-bottom” approach; and
 2 (2) the “top-*to*-bottom” approach. The first approach calculates the pass-through rates “by
 3 regressing the price at the bottom of the distribution channel on the cost at the top of the
 4 distribution channel.” Id. at 91. Only data from the top (i.e., seller) *and* bottom (i.e., retailer)
 5 of the distribution channel is used; pass-through rates for *intermediaries* are not considered
 6 separately. Id. at 92. The second approach looks at the pass-through rate at “each level of
 7 distribution.” Unlike the top-and-bottom study, the top-to-bottom analysis incorporates data
 8 from multiple levels of the distribution channel (including intermediate resellers) to trace the
 9 product through the entire distribution chain. Id.

10 In the instant case, Dr. Netz conducted an “illustrative” regression analysis only
 11 utilizing the top-*and*-bottom approach, based on data relating to five entities: one for
 12 Defendant SanDisk; one for an OEM (Lexar); two from resellers (Amazon.com and CDW);
 13 and one based on data from two market research companies (DRAMeXchange and iSuppli).
 14 Netz Decl. at 93-95. Dr. Netz claims that her analyses show a pass-through rate in each
 15 instance in excess of 100%, which she claims allegedly can be calculated on a “formulaic
 16 basis.” Id. at 95. Irrespective of whether these findings are accurate (which Defendants
 17 vigorously dispute), they actually underscore the *individualized* nature of the evidence that will
 18 be required to show impact. Dr. Netz’s analysis amounts to a retailer-by-retailer,
 19 manufacturer-by-manufacturer and product-by-product analysis of pass-through. See Burtis
 20 Decl. ¶¶ 78-91; Netz Depo. at 184:3-185:15. Indeed, this is the identical analytical flaw for
 21 which Dr. Netz was criticized in In re Graphics Processing. 253 F.R.D. at 505 (“The record
 22 shows that the only way to fully assess pass-through in this action would be to conduct a
 23 wholesaler-by-wholesaler and re-seller-by-re-seller investigation, which would essentially
 24 result in thousands of mini-trials, rendering this case unmanageable and unsuitable for class
 25 action treatment.”) (internal quotation marks and citation omitted). This challenge is only
 26 exacerbated by Dr. Netz’s reliance on multiple variables in the course of conducting each
 27 regression analysis.

1 Even if Dr. Netz's illustrative regressions were probative of Plaintiffs' ability to
2 demonstrate the antitrust impact on indirect-purchasers on a common, formulaic basis, their
3 reliability is questionable due to their averaging of NAND flash memory prices. See In re
4 Graphics Processing, 253 F.R.D. at 504 ("If this class were certified, Dr. Netz's regressions
5 would either be overly reliant on averages and would thus sweep in an unacceptable number of
6 uninjured plaintiffs, or they would be unmanageably individualized."). In her analyses, Dr.
7 Netz makes no attempt to assess whether pass-through rates vary by product or by customer.
8 Burtis Decl. ¶ 82. Claiming that *all* products are "in the same market," Dr. Netz appears to
9 presume that the pass-through rate for all products and for all customers in the group to be the
10 same. Id. For example, Dr. Netz's study of Amazon.com data includes numerous personal
11 media products ranging in price from under twenty dollars to several hundred dollars. Id. ¶ 83.
12 Yet, her regressions do not distinguish these products in any manner, but simply assume that
13 the pass through rates for all personal media players are the same and are equal to the average
14 pass through rate for all products. Id. The problem with such an approach is that it ignores the
15 different elasticities associated with high-end and low-end products which, in turn, skew the
16 actual pass-through rate. Id. ¶¶ 84-88.

17 The Court is not convinced by Plaintiffs' arguments and evidentiary showing that the
18 antitrust impact on indirect purchasers, i.e., the overcharge passed-through by the direct
19 purchaser, can be established on a common, formulaic basis. The products, channels and
20 markets are sufficiently numerous and diverse to preclude application of a reliable and
21 meaningful method of calculating pass-through rates on a class-wide basis. An individualized
22 inquiry will be necessary, which therefore precludes certification under Rule 23(b)(3).

23

24

25

26

27

28

3. Presumption of Impact

2 Alternatively, Plaintiffs argue that they are entitled to a “presumption” of impact with
3 respect to their claims under state law. See Pl.’s Mot. at 24-25.¹¹ By way of illustration,
4 Plaintiffs argue that California’s Unfair Competition Law, Calif. Bus. & Prof. Code § 17200, *et*
5 *seq.*, (one of the claims alleged by the California class) “permits an inference of antitrust
6 impact to indirect purchasers by horizontal per se illegal price fixing conspiracies.” Pl.’s Mot.
7 at 24. As support for this proposition, Plaintiffs rely principally on B.W.I. Custom Kitchen v.
8 Owens-Illinois, Inc., 191 Cal.App.3d 1341, 1352 (1987). The court recognized that “when a
9 conspiracy to fix prices has been proven and plaintiffs have established they purchased the
10 price-fixed goods or services, the jury can infer plaintiffs were damaged.” Id. at 1352.
11 Although at first blush B.W.I. appears to support Plaintiffs’ assertion, a closer review of the
12 court’s analysis reveals that it has no application here.

13 In B.W.I., a class of indirect purchasers of glass containers (i.e., food jars and wine
14 bottles) brought a class action against numerous manufacturers alleging that they engaged in a
15 conspiracy to fix prices in violation of California’s antitrust statute and unfair competition
16 statutes. Id. at 1351. Plaintiffs did not deal directly with any defendant, but instead, purchased
17 their glass containers from a “middleman” or independent distributor who, in turn, purchased
18 glass containers from defendants as well as other manufacturers. Id. at 1346. The trial court
19 declined to certify the class on the ground that common questions of law and fact did not
20 predominate over questions affecting only individual class members. Id. at 1345. The
21 California Court of Appeal reversed, holding, *inter alia*, that injury could be inferred on a
22 classwide basis. Id. at 1350-51. The court reasoned that such an inference was permissible
23 based on the particular circumstances presented “[w]here the product in question is ultimately

1 sold to the consumer, and is largely unchanged in form from the price-fixing manufacturer to
 2 the Indirect-Purchaser” Id. at 1353.

3 Plaintiffs intimate that here, as in B.W.I., they are entitled to an *inference* of class-wide
 4 impact. Mot. at 24. The Court disagrees. In reaching its decision, the court in B.W.I. was
 5 careful to distinguish between situations in which the product received by an indirect purchaser
 6 from the distributor was in the same form that it was originally sold by the defendant
 7 manufacturer—and those cases in which the product purchased by the indirect purchaser was
 8 altered in some manner. Id. at 1352. In the former case, “the effects of the price-fixing [are]
 9 not obscured by substantially altering or adding to the item received from the manufacturer,”
 10 and hence, it is permissible in that instance to presume that the overcharge was passed-through
 11 in a manner that impacted the class in a “generalized” manner. Id. However, in the latter case
 12 where, as here, the product purchased by the Indirect-Purchaser is not in the same form sold by
 13 the defendant, the pass-through analysis is far more complicated because the overcharge may
 14 be affected by a number of different factors that affect the final cost to the indirect purchaser.
 15 Id.

16 This case is fundamentally distinguishable from B.W.I. Unlike B.W.I., Plaintiffs are
 17 not simply businesses which purchased a uniform product from a middleman in the same form
 18 as the product was manufactured. Rather, Plaintiffs are defined as *any* indirect purchaser of
 19 *any* number of products containing *any* number of different types of “NAND Flash Memory.”
 20 The Amended Complaint broadly defines NAND Flash Memory as “Flash Memory based on
 21 NAND technology” and “is either a stand-alone product or a substantial component of another
 22 product[.]” Am. Compl. ¶ 12. There are numerous categories and types of NAND flash
 23 memory chips which have changed along with the state of technology during the class period,
 24 which exceeds a decade. Keeley Decl. ¶ 54. Adding to this complexity is the myriad types of
 25 products that incorporate NAND technology, such as flash memory cards, USB flash drives,
 26 flash-based digital media players (such as the iPod nano, iPod shuffle, the iPod Touch, among
 27 other players), laptop computers, GPS devices, gaming devices, solid state drives, mobile
 28 telephones and portable computing devices. Id.; Keeley Decl. ¶ 52. Given the sheer diversity

1 in NAND flash memory chips and products incorporating such technology, the effects of
 2 Defendants' allegedly anticompetitive conduct cannot be assumed as in the case of unaltered
 3 glass food containers at issue in B.W.I.¹²

4 **C. ASCERTAINABLE CLASS**

5 Even if Plaintiffs had presented compelling arguments for certifying the class under
 6 Rule 23(b)(3) or (b)(2), the Court finds that certification is inappropriate given Plaintiffs'
 7 failure to meet the implicit requirement that an "identifiable and ascertainable class exists."
 8 See Mazur v. eBay, Inc., 257 F.R.D. 563, 567 (N.D. Cal. 2009) (Patel, J.); Oshana, 472 F.3d at
 9 513 (holding that in addition to meeting the requirements of Rule 23(a), "[t]he plaintiff must
 10 also show . . . that the class is indeed identifiable as a class."); c.f. Lozano, 504 F.3d at 730
 11 (certification improper if there is "no definable class."). The class definition must be
 12 "sufficiently definite" so that its members "can be ascertained by reference to objective
 13 criteria." Whiteway v. FedEx Kinko's Office and Print Servs., Inc., 2006 WL 2642528, at *3
 14 (N.D. Cal., Sept. 14, 2006) (Armstrong, J.). "[A] class will be found to exist if the description
 15 of the class is definite enough so that it is administratively feasible for the court to ascertain
 16 whether an individual is a member." O'Connor v. Boeing N. Am., Inc., 184 F.R.D. 311, 319
 17 (C.D. Cal. 1998). Where information necessary to ascertain the class is not readily available,
 18 class certification is inappropriate. See Deitz v. Comcast Corp., 2007 WL 2015440 at *8 (N.D.
 19 Cal., July 11, 2007) (finding that a proposed class consisting of cable subscribers who owned
 20 cable-ready televisions or related equipment was not ascertainable where defendant did not
 21

22 ¹² As here, courts have declined to apply B.W.I. in cases where there are potentially
 23 multiple intermediaries between the manufacturer and end-user or where the product purchased
 24 by the end-user is in the same form as it left the manufacturer. See In re Methionine, 204
 25 F.R.D. at 166 (B.W.I. inapplicable where "the evidence shows that the proof will differ for
 26 each class member as to whether that member was overcharged for methionine or a
 27 methionine-containing product, and if so, whether and to what extent the member passed on the
 28 overcharge and, if the overcharge was fully passed on, how the class member was otherwise
 injured by the conspiracy."); Global Minerals & Metals Corp. v. Superior Court, 113
 Cal.App.4th 836, 852-53 (2003) (holding that B.W.I. was inapplicable where the market in
 which the anticompetitive activity occurred was more complex). Although the motion for class
 certification limits the products at issue to flash memory cards, USB drives and digital media
 players, Mot. at 1, this does not alter the fact that the distribution chain and the characteristics
 of the market in B.W.I. is distinguishable from the circumstances involved herein.

1 maintain records to identify those customers thus making it “impossible to determine without
 2 significant inquiry which subscribers owned such devices”).

3 Here, the nationwide and statewide classes are defined as all persons and entities
 4 currently residing in the United States and/or one of the Indirect-Purchaser States who, from
 5 January 1, 1999 until the present, indirectly purchased NAND flash memory from one of the
 6 Defendants for their own use and not for resale. Am. Compl. ¶¶ 193-209. Defendants contend
 7 once a NAND flash memory chip is incorporated into a memory card, USB drive or digital
 8 media player, it is not possible to determine the chip’s manufacturer simply by examining the
 9 finishing product or even disassembling it. Opp’n at 24-25. They further contend that the
 10 difficulty in ascertaining the class is exacerbated by the fact that twenty percent of the NAND
 11 flash memory sold is attributable to non-Defendant manufacturers, and that OEMs and other
 12 intermediaries purchase chips from different manufacturers for the same finished product. Id.

13 In response, Plaintiffs rely on the reply declaration of their expert, Dr. Janet Netz, who
 14 states that she reviewed data from Lexar, an OEM that sells memory cards and USB drives,
 15 and opines that “[t]hese data contain several thousand distinct end-product model codes for
 16 which the NAND flash memory vendor can be discerned.” Netz Reply Decl. at 59. Dr. Netz
 17 also notes that “NAND flash vendors *currently* support the Open NAND Flash Interface
 18 (ONFi) standard,” which allows for a command to be sent to the particular chip which, in turn,
 19 will result in the disclosure of the chip’s manufacturer. Id. (emphasis added). However, the
 20 Court does not consider new arguments or evidence presented for first time in a reply. See In
21 re Rains, 428 F.3d 893, 902 (9th Cir. 2005). Since it is Plaintiffs’ initial burden to demonstrate
 22 the existence of an ascertainable class, such evidence should have been proffered with
 23 Plaintiffs’ moving papers in order to afford Defendants a full and fair opportunity to respond.
 24 That aside, Dr. Netz’s response, in fact, underscores the factually-intensive nature and the
 25 administrative infeasibility of ascertaining class members.¹³ Based upon Plaintiffs’ showing,
 26

27 ¹³ The Court also notes that Dr. Netz’s comments regarding the fact that NAND flash
 28 vendors “currently” follow the ONFi standard is not probative of whether chips manufactured
 during the class period, which date back to January 1, 1999, can be traced to their
 manufacturer.

1 the Court is not persuaded that the class is ascertainable, which constitutes an alternative basis
 2 for denying class certification.

3 **II. MOTION TO SUBSTITUTE PARTY-PLAINTIFFS, OR IN THE ALTERNATIVE,
 4 FOR LEAVE TO AMEND THE COMPLAINT TO SUBSTITUTE PARTY
 5 PLAINTIFFS**

6 **A. BACKGROUND**

7 Plaintiffs filed the instant motion to substitute nine plaintiffs as class representatives for
 8 eight states, pursuant to Rule 21, or in the alternative, pursuant to Rule 15(a). Mot. at 1.
 9 Plaintiffs assert that “[a]s a result of [their] further refinement of the class definition and class
 10 certification theory,” they have concluded that the eight original plaintiffs will not adequately
 11 represent the interests of class members from their respective jurisdictions. Mot. at 2.
 12 Consequently, Plaintiffs seek to substitute the following persons and entities (“Substitute
 13 Plaintiffs”):

State	Named Plaintiff	Substitute Plaintiff
Arizona	Sara Hecht	Scott Kiburz
Arkansas	Jean McClellan-Chambers and Jamac Enterprises	Mark Miles
D.C.	Travis Wiebe	Dona Culver
Florida	Joshua Steele	David Deehl and Deehl & Carlson, P.A.
Iowa	Benjamin Northway	Ted Charles Nixon
Kansas	Lindsey Morgan	Scott B. Wilson
New York	Kelly Fahner	Michael F. Calabrese
Tennessee	George Davis	Cory Wiles

20 Mot. at 2.

21 **B. LEGAL STANDARD**

22 Plaintiffs seek leave to file the proposed second amended complaint, pursuant to Rule
 23 15(a), to add the Substitute Plaintiffs. Mot. at 4.¹⁴ Rule 15(a)(2) provides that leave to amend
 24 a complaint should be “freely given when justice so requires.” Fed.R.Civ.P. 15(a)(2); Moss v.
 25 United States Secret Serv., 572 F.3d 962, 972 (9th Cir. 2009). Rule 15 “is to be applied with
 26 extreme liberality.” Eminence Capital, LLC v. Aspeon, Inc., 316 F.3d 1048, 1051 (9th Cir.

27
 28 ¹⁴ Trong Nguyen, Jason Perkins, and Jai Paguirigan are withdrawing as plaintiffs from
 California and Wisconsin but have not proposed any substitute representatives. Mot. at 3.

1 2003). “Four factors are commonly used to determine the propriety of a motion for leave to
 2 amend. These are: bad faith, undue delay, prejudice to the opposing party, and futility of
 3 amendment.” Ditto v. McCurdy, 510 F.3d 1070, 1079 (9th Cir. 2007) (citations and internal
 4 quotation marks omitted). The party opposing the amendment carries the burden of showing
 5 why leave to amend should not be granted. DCD Programs, Ltd. v. Leighton, 833 F.2d 183,
 6 187 (9th Cir. 1987). The decision to grant or deny a request for leave to amend rests in the
 7 discretion of the trial court. See California v. Neville Chem. Co., 358 F.3d 661, 673 (9th Cir.
 8 2004).

9 The above-listed factors are not given equal weight. Bonin v. Calderon, 59 F.3d 815,
 10 845 (9th Cir. 1995). “[P]rejudice to the opposing party . . . carries the greatest weight.”
 11 Eminence Capital, 316 F.3d at 1052. In fact, “[a]bsent prejudice, or a strong showing of any of
 12 the remaining . . . factors, there exists a presumption under Rule 15(a) in favor of granting leave
 13 to amend.” Id. That said, “[f]utility of amendment can, by itself, justify the denial of a motion
 14 for leave to amend.” Bonin, 59 F.3d at 845. And while “[d]elay alone is insufficient to justify
 15 denial of leave to amend,” Jones v. Bates, 127 F.3d 839, 847 (9th Cir. 1997), “late amendments
 16 to assert new theories are not reviewed favorably when the facts and the theory have been
 17 known to the party seeking amendment since the inception of the cause of action,” Acri v. Int’l
 18 Ass’n of Machinists & Aerospace Workers, 781 F.2d 1393, 1398 (9th Cir. 1986); see also
 19 Lockheed Martin Corp. v. Network Solutions, Inc., 194 F.3d 980, 986 (9th Cir. 1999) (“A need
 20 to reopen discovery and therefore delay the proceedings supports a district court’s finding of
 21 prejudice from a delayed motion to amend the complaint.”); Jackson v. Bank of Hawaii, 902
 22 F.2d 1385, 1388 (9th Cir. 1990) (“[r]elevant to evaluating the delay issue is whether the
 23 moving party knew or should have known the facts and theories raised by the amendment in
 24 the original pleading.”).

25 **C. ANALYSIS**

26 Plaintiffs assert that the “proposed amendment does not change the nature of the claims
 27 asserted, revise the factual or legal questions presented, or alter the liability exposure or
 28 obligations of any Defendant.” Mot. at 6. Moreover, Plaintiffs aver that they filed their motion

1 “in a timely fashion,” that “the amendment does not assert futile claims,” and that “they are
 2 acting in good faith.” Id. at 5-6. In response, Defendants contend that Plaintiffs’ request is
 3 untimely, threatens further delays, and is unduly prejudicial. Opp’n at 6-9.¹⁵ On balance, the
 4 Court finds that Defendants have presented the more compelling argument.

5 Plaintiffs seek to maintain this action on a class basis under Rule 23. Germane to that
 6 inquiry is whether “there are questions of law or fact common to the class,” “the claims or
 7 defenses of the representative parties are typical of the claims or defenses of the class,” and
 8 whether the “representative parties will fairly and adequately protect the interests of the class.”
 9 Fed.R.Civ.P. 23(a)(2)-(4). This necessarily requires consideration of the named plaintiff’s
 10 ability to serve as a class representative. See Rodriguez v. Hayes, 591 F.3d 1105, 1122 (9th
 11 Cir. 2010) (“The commonality requirement will be satisfied if the *named plaintiffs* share at
 12 least one question of fact or law with the grievances of the prospective class”) (emphasis
 13 added); Hanon, 976 F.2d at 508 (“The purpose of the typicality requirement is to assure that the
 14 interest of the *named representative* aligns with the interests of the class”) (emphasis added);
 15 Staton v. Boeing Co., 327 F.3d 938, 954 (9th Cir. 2003) (“Rule 23(a)(4) permits the
 16 certification of a class action only if the *representative parties* will fairly and adequately
 17 protect the interests of the class”) (emphasis added).

18 Plaintiffs’ proposed substitution of nine new plaintiffs in place of twelve currently-
 19 named plaintiffs would unduly prejudice Defendants, who have been preparing their defense
 20 based on the identities of the class representatives identified in the pleadings. Allowing
 21 Plaintiffs to “swap out” certain class representatives at this juncture would require Defendants
 22 to conduct new and/or additional discovery that would not otherwise have been required had
 23 Plaintiffs joined the appropriate representatives in the first instance. See In re HP Inkjet Printer
 24 Litig., 2008 WL 2949265, at *7 (N.D. Cal., July 25, 2008) (concluding that “Plaintiffs’ request
 25 to amend the complaint to add a third named plaintiff should be denied because it would cause

26
 27 ¹⁵ While Defendants’ substantive discussion relies on Rule 15, they also make a passing
 28 reference to Rule 20. Opp’n at 5:27. However, the Court declines to analyze the motion to
 amend under Rule 20 because Plaintiffs themselves do not make any reference to it, and
 Defendants fail to provide any substantive analysis under Rule 20.

1 undue delay and prejudice by requiring [Defendant] to conduct costly discovery and also
 2 because be amendment would be futile"); Fraker v. Marysville Exempted Village Schools, ---
 3 F. Supp. 2d ---, ---, 2010 WL 785283, at *3 (S.D. Ohio, Mar. 8, 2010) (finding that defendants
 4 "would be severely prejudiced if they were added at this late juncture, having been deprived of
 5 their right to conduct discovery and file dispositive motions.").

6 Moreover, the motion, which was filed contemporaneously with the motion for class
 7 certification, is untimely because Plaintiffs waited until after their class certification filing to
 8 request this substitution of plaintiffs. It is axiomatic that a Plaintiffs should have made a
 9 preliminary determination that each of their representatives actually qualified as an indirect
 10 purchaser. Such an inquiry should have been conducted at the inception of the litigation, not
 11 years after the action had commenced. See Jackson, 902 F.2d at 1388 ("Relevant to evaluating
 12 the delay issue is whether the moving party knew or should have known the facts and theories
 13 raised by the amendment in the original pleading."); Palmer v. Stassinos, 236 F.R.D. 460, 466
 14 (N.D. Cal. 2006) (denying leave to amend because "[t]he defect in [the plaintiffs'] claims is not
 15 due to an understandable mistake of suing the wrong party – rather [plaintiffs] are themselves
 16 the wrong parties") (internal quotations omitted).

17 The Court further finds that denial of the proposed substitution is justified on the basis
 18 of futility. The inclusion of new class representatives will not cure the deficiencies discussed
 19 above which militate against class certification. See In re HP Inkjet Printer Litig., 2008 WL
 20 2949265, at *7 ("A proposed amendment to a class allegation may be deemed futile where
 21 even with the amendment class certification would be denied."); E. SPIRE Commc'ns, Inc. v.
 22 N.M. Public Reg. Commc'n, 392 F.3d 1204, 1211 (10th Cir. 2004) ("A court properly may
 23 deny a motion for leave to amend as futile when the proposed amended complaint would be
 24 subject to dismissal for any reason."). Accordingly, Plaintiffs motion to amend is denied.

25 **III. PLAINTIFF CHRISTOPHER BESSETTE'S MOTION TO DISMISS**

26 Plaintiffs seek to dismiss the claims of Bessette, pursuant to Federal Rule of Civil
 27 Procedure 41(a)(2). Mot. at 1. Rule 41(a)(2) provides that: "[A]n action may be dismissed at
 28 the plaintiff's request only by court order, on terms that the court considers proper.... Unless

1 the order states otherwise, a dismissal under this paragraph . . . is without prejudice.” “[T]he
 2 decision to grant a voluntary dismissal under Rule 41(a)(2) is addressed to the sound discretion
 3 of the District Court” Kern Oil Refining Co. v. Tenneco Oil Co., 792 F.2d 1380, 1384
 4 (9th Cir. 1986). However, the “broad grant” of such discretion “does not contain a preference
 5 for one kind of dismissal or another.” Hargis v. Foster, 312 F.3d 404, 412 (9th Cir. 2002).

6 Where the request is to dismiss without prejudice, “[a] district court should grant a
 7 motion for voluntary dismissal under Rule 41(a)(2) unless a defendant can show that it will
 8 suffer some plain legal prejudice as a result.” Smith v. Lenches, 263 F.3d 972, 975 (9th Cir.
 9 2001); see also Hamilton v. Firestone Tire & Rubber Co., 679 F.2d 143, 145 (9th Cir. 1982)
 10 (“In ruling on a motion for voluntary dismissal, the District Court must consider whether the
 11 defendant will suffer some plain legal prejudice as a result of the dismissal.”). “Legal
 12 prejudice” is defined as “prejudice to some legal interest, some legal claim, some legal
 13 argument.” Id. at 976. “[T]he expense incurred in defending against a lawsuit does not amount
 14 to legal prejudice.” Westland Water Dist. v. United States, 100 F.3d. 94, 97 (9th Cir. 1996).
 15 Furthermore, “[u]ncertainty because a dispute remains unresolved” or because “the threat of
 16 future litigation . . . causes uncertainty” does not result in plain legal prejudice. Smith, 263 F.3d
 17 at 976. Finally, “plain legal prejudice does not result merely because the defendant will be
 18 inconvenienced by having to defend in another forum or where a plaintiff would gain a tactical
 19 advantage by that dismissal.” Id.

20 In the instant case, Defendants have no objection to the dismissal of Bessette’s claims,
 21 but they argue that his claims should be dismissed *with* prejudice. Opp’n at 1. Bessette states
 22 that he did not purchase any products at issue in this litigation, and as such lacks standing to
 23 assert indirect purchaser claims. Mot. at 1. This admission warrants dismissal of his claims
 24 with prejudice. See Thaxton v. Int’l Broth. of Painters, 933 F. Supp. 560, 562 (S.D.W.Va.
 25 1996) (“Although Plaintiff requests dismissal of those claims without prejudice, the Court
 26 dismisses with prejudice. Because both parties agree Plaintiff lacks standing [...], those claims
 27
 28

1 should not be revived in any future litigation.”).¹⁶ The Court therefore dismisses Bessette’s
2 claims with prejudice.

3 **CONCLUSION**

4 For the reasons stated above,

5 IT IS HEREBY ORDERED THAT:

6 1. Indirect-Purchaser Plaintiffs’ Motion for Class Certification is DENIED.
7 2. Indirect-Purchaser Plaintiffs’ Motion to Substitute Party Plaintiffs, or in the
8 Alternative, for Leave to Amend to Substitute Party Plaintiffs is DENIED.

9 3. Indirect-Purchaser Plaintiff Christopher Bessette’s Motion to Dismiss is
10 GRANTED IN PART AND DENIED IN PART. The claims of Bessette are DISMISSED
11 WITH PREJUDICE.

12 4. This Order terminates Docket Nos. 562, 567 and 593.

13 IT IS SO ORDERED.

14 Dated: March 31, 2010

15 
16 SAUNDRA BROWN ARMSTRONG
17 United States District Judge

18
19
20
21
22
23
24
25 ¹⁶ In their reply papers, Plaintiffs make a passing remark that Bessette’s individual
26 claims against Defendants should be preserved because even though Bessette’s “purchase of
27 his video game console does not fit under the claims of injury alleged in Plaintiff’s class
28 definition, his purchase may still give rise to individual damage claims, and therefore, his
dismissal should be without prejudice.” Reply at 2. However, Plaintiffs fail to provide any
authority that would support this assertion, and the Court declines to find this persuasive in
light of the other cases previously cited to in this opinion.